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A FEW EVERGREENS

Picea omorika: The Serbian spruce is noted for its excellent dark green foliage and its pyramidal upright habit of growth. The foliage is dense and the branches, particularly on older specimens, are often drooping, adding considerably to the beauty of the tree. It might be said that this is the best of the spruces for ornamental planting, and, fortunately, it is now becoming available in many nurseries in the eastern United States.

It was introduced into this country by the Arnold Arboretum in 1881, when seed was sent here by Dr. Carl Bolle of Berlin. It has formed large forests in southeastern Europe, and in this country it should be used much more than it is in ornamental plantings, particularly as a specimen tree.

Picea orientalis: Another excellent spruce for ornamental planting is the Oriental spruce, valued for its dark green foliage and dense pyramidal habit of growth. Its needles are only one half as long as those of *P. omorika*. In the Arboretum this tree is unfortunately attacked by borers which often kill the central leader. Since it is best grown as a single leader tree, this trouble is often serious.

Both of these species are rather slow growing, but have great possibilities in ornamental work. They are considerably more valuable to us than either the Norway spruce or the Colorado blue spruce.

Ten years ago, the following statement was published in this Bulletin concerning these last mentioned trees, and it is certainly true today.

"Unfortunately the two Spruce trees which for years have been and are still generally planted in the northeastern part of the country, the so-called Norway Spruce of Europe (*Picea Abies* or *P. excelsa*) and the Rocky Mountain Blue Spruce (*Picea pungens*) from Colorado and eastern Utah to northern New Mexico and Wyoming, have not proved successful in the eastern states. Fifty or sixty years ago the Norway Spruce was very generally planted in southern New England where, however, it commences to fail at the top when about thirty years old and soon becomes ragged and unsightly, the leading shoot dying or failing to make a satisfactory growth and all the upper part of the tree gradually becoming thin, with the result that there is hardly a park or country place in New England where the sad spectacle of such half-dead trees cannot be seen. Easily raised from seed which is readily obtained, young plants grow rapidly, and they are therefore profitable plants for nurserymen to handle; and the public, in spite of the American experience with this tree, continues to buy it. In some of the states it is raised by state agencies and given away or sold at a nominal price, or is planted by the state in reforesting operations. Perhaps no other species of Pinaceae has produced so many dwarf forms and some of these are handsome and interesting plants.

"The Colorado Blue Spruce is still one of the most popular conifers in the northern United States where it is propagated and planted in immense numbers in spite of the fact that it early loses its value as an ornamental tree. It is very hardy, is easily raised and grows rapidly. The young plants are of good shape and dense habit, their lower branches resting on the ground. For the nurseryman the Blue Spruce has everything to recommend it; the easy germination of the seeds, quick growth and unusual beauty of the young plants lead to the certainty of a quick sale. To a planter looking for something more important than a plant for a city garden or a small suburban yard this tree has certainly proved a failure. This is not surprising for *Picea pungens* growing in small groves near streams in the valleys of the Rocky Mountains long before it attains its full size is a thin, scraggy, miserable looking tree with a few short branches near the top of the stem. This tree was discovered in 1862 and was planted the following year in the Harvard Botanic Garden."*

*There is a plant in the Arboretum over sixty years old, and it is kept here as a warning for planters who are deceived by the beauty of young plants.

Cedrus libani: The Cedar of Lebanon has had an interesting history at the Arboretum. It shows clearly how much it pays to make a selection of seed from hardy sources, particularly of a species which may prove tender. Prior to 1902, the Arboretum had repeatedly tried to grow this interesting tree, so rich in biblical history. Each time, though seedlings came through one or two winters, they were eventually killed. Until 1902, most of the seed has been obtained from the general region around Palestine. However, the species was known also in Asia Minor on the Anti-Taurus mountain range, far north of the Lebanon range in Palestine, and in a much colder climate. Professor Sargent, realizing the possibilities of collecting seeds from hardier plants, had some collected from this more rigorous habitat, and in the spring of 1902 they yielded a large number of seedlings. Since that time, all have proved perfectly hardy, even in the most severe winters and themselves have yielded hardy seedlings. They have suffered neither from drought nor cold, except for occasional leaf burning. However, a few have been lost in transplanting, since they are unusually hard to move. Some of these trees in the Arboretum are now almost forty feet high. They are living examples of the successful use of geographic studies in the selection of seed sources. The Arboretum takes pride in being able to claim the credit for introducing this exotic tree into the northeastern part of the United States where previously it would not grow.

Thuja plicata: In the coastal region of the northwestern states and British Columbia, the Giant Arborvitae grows to great size and is one of the most important timber trees in North America. Fortunately, it ranges eastward to Idaho and northern Montana, a region which is very cold. Seed collected from this locality yields seedlings which prove hardy in Massachusetts and northwestern New York state. It is the largest and handsomest of the arborvitaes, its foliage having a peculiar shining lustre which is outstanding. Another important point in its favor is that in the winter, its foliage does not turn a dead brown as does that of most of the other arborvitaes. Rather, it turns a good bronze color, which is held a greater part of the winter. Plants of the Giant Arborvitae, grown from hardy parents, are a most valuable asset to any garden in the winter time.

Sciadopitys verticillata: In 1928, E. H. Wilson wrote of this plant as follows: "The Japanese Umbrella Pine is among the most notable conifers that can be grown in the climate of Massachusetts. It is of dense, pyramidal habit with ascending-spreading branches. The leaves are borne in clusters around the stem, one tier above another, suggesting a parasol, hence its common name. They unfold bright green but soon change to black-green and remain so throughout the winter. The strap-shaped leaves, each from 3 to 4 inches long, are thick and leathery in texture with a white line on the under side. It likes a cool situation and good soil and would appear to thrive better in New England than in the British Isles. There are several fine specimens here and there in Massachusetts, notably in Newburyport. By the old regime in Japan, this was one of the seven famous trees, the illegitimate felling of which was a capital offence. The wood is white, fragrant, very durable in water, and is used ~~much~~ in Japan for making bathtubs and small boats. Like certain other trees it does not grow old gracefully, and in the adult tree with its narrow, often spear-shaped, crown it is hard to recognize the stately ornamental plant we know in gardens. A monotype, it is confined mainly to the mountains of central Japan, being very abundant on Koyasan, a mountain not far distant from the ancient capital of Nara. The Umbrella Pine is easily raised from seeds but grows slowly. No other form of propagation is known, but on account of its great hardiness and distinct appearance nurserymen ought to raise it in quantity. It was one of the plants introduced into America by Dr. G. R. Hall in 1862."

Donald Wyman

These Bulletins will now be discontinued until the spring of next year.

Those who have not yet renewed their subscriptions for 1937 should do so at once. Recent subscribers for 1936 will automatically receive the Bulletin for 1937, since 1936 issues are exhausted.

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